Listing of Claims:

1.   (Currently Amended) A method for **selecting** ~~executing~~ inverse discrete cosine transform (iDCT) algorithms, ~~said method~~ comprising ~~the steps of~~:

    a)   examining the coefficients of a DCT block to determine ~~the position of the~~ **an** End of Block (EOB) **length** ~~coefficient~~;

    b)   selecting an iDCT algorithm **from a plurality of iDCT algorithms** according to the **EOB length** [position of said EOB coefficient and using an EOB histogram for B-frames]; and

    c)   executing ~~said~~ **the selected** iDCT algorithm.

2.   (Currently Amended) The method of claim 1, **further comprising:**

generating a histogram of EOB lengths for a number of B frames corresponding to a shot, [wherein said iDCT algorithm is an iDCT_high algorithm available to said method and selected using an EOB histogram of the first B-frame of a shot].

3.   (Currently Amended) The method of **claim 2** ~~claim 1~~, wherein said iDCT algorithm is an iDCT_low algorithm available to said method and selected using an EOB histogram of the first B-frame of ~~a~~ **the** shot.

4.   (Currently Amended) A system for reducing iDCT execution time, said system comprising:

    a)   determination means for determining ~~the position of~~ an End of Block (EOB) ~~coefficient~~ **length** in a DCT block;

b)   selection means for selecting an iDCT algorithm **from a plurality of iDCT algorithms** based upon the ~~position of~~ said EOB **length** ~~coefficient~~ and using an EOB **length** histogram **for a number** of B-frames; and

c)   execution means for executing said **selected** iDCT algorithm.

5.   (Currently Amended) A system **as recited in claim 4,** [for reducing iDCT execution time, said system comprising:

a)   determination means for determining the position of an End of Block (EOB) coefficient in a DCT block;

b)   selection means for selecting an iDCT algorithm based upon the position of said EOB coefficient; and

c)   execution means for executing said iDCT algorithm;]

wherein said iDCT algorithm is **selected** ~~determined~~ by creating an EOB **length** histogram of the first B-frame of a shot.

6.   (Currently Amended) A **computer program encoded on a** computer readable medium containing instructions for selecting and executing inverse discrete cosine transform (iDCT) algorithms, said instructions performing the steps of:

a)   examining the coefficients of a DCT block to determine **an End of Block (EOB) length based upon** the position of the End of Block (EOB) coefficient;

b)   selecting an iDCT algorithm according to the **EOB length** ~~position of said EOB coefficient~~ and using an EOB **length** histogram for B-frames; and

c)   executing said iDCT algorithm.

7. (Currently Amended) The method of claim 2 wherein said iDCT_high algorithm is based upon an EOB ~~coefficient~~ **length** of 39 or 40.

8. (Currently Amended) The method of claim 3 wherein said iDCT_low algorithm is based upon an EOB ~~coefficient~~ **length** of 14 or 25.

9. (Currently Amended) The medium of claim 6 wherein said iDCT_high algorithm is based upon an EOB ~~coefficient~~ **length** of 39 or 40.

10. (Currently Amended) The medium of claim 6 wherein said iDCT_low algorithm is based upon an EOB ~~coefficient~~ **length** of 14 or 25.

11. (Currently Amended) A system for reducing inverse discrete cosine transform (iDCT) execution time, said system comprising:

    a) a plurality of iDCT algorithms comprising an iDCT_high algorithm and an iDCT_low algorithm;

    b) a switch for selecting a selected algorithm from said plurality of iDCT algorithms and using **a histogram of** an End of Block**(EOB) lengths** ~~histogram~~ for **a number of** B-frames; and

    c) a computer processor for executing said selected algorithm.

12. (Currently Amended) The system of claim 11 wherein said switch accepts as input:

    a) a block of DCT coefficients;

    b) an End of Block address; and

    c) a picture type **bit** rate.

13.   (Previously Presented) The system of claim 11 wherein said plurality of iDCT algorithms further comprises:

iDCT_Normal, iDCT_AC and iDCT_DC.

14.   (Cancelled)

15.   (Cancelled)

16.   (Cancelled)

17.   (Cancelled)

18.   (Currently Amended) The method of **claim 2** ~~claim 17~~ wherein the shot includes a sequence of frames bounded on each side by a video transition.

19.   (Previously Presented) The method of claim 18 wherein the video transition includes one of a cut frame, a dissolve, or a cross-dissolve.

20.   (Currently Amended) The method of **claim 1** ~~claim 17~~ wherein the plurality of iDCT algorithms includes one of: iDCT_Normal, iDCT_AC, iDCT_high, iDCT_low and iDCT_DC.

21.   (New) The method of claim 2 wherein said iDCT algorithm is an iDCT_high algorithm available to said method and selected using an EOB histogram of the first B-frame of the shot.